

with a retroverted uterus. There had been dribbling for five days before admission, and 80 oz. of urine were withdrawn. The bladder was kept empty, but the patient died five days later, soon after rupture of the bladder was diagnosed.—Dr. BLAIR BELL (Liverpool), light and useful retractors for pelvic surgery, the blades being of stiff wire and having large fenestrae.—Drs. H. BRIGGS and J. H. WILLETT (Liverpool) described two cases of *Fibromyoma*, in which operation was required for symptoms caused by the spontaneous extrusion of fibroids into the uterine cavity. In each case subsequent examination showed the endometrium to be the seat of adeno-carcinoma.—Dr. A. STOOKES (Liverpool) mentioned a case of *Caesarean section* for contracted pelvis in which the pulse suddenly ran up to 160 at the end of the operation. The same evening the temperature was 103° F. and the pulse 140. No cause for these manifestations could be discovered, and the patient's condition became quite normal during the next six days.—Dr. W. WALTER (Manchester) showed a specimen of *Pyosalpinx* with the adherent appendix vermiformis, which was enlarged by inflammatory changes in its outer wall, the mucosa remaining normal. The origin of the pyosalpinx was probably tuberculous. He thought removal of the appendix was required in some cases of pelvic inflammation on the right side, but would not remove the organ merely on account of slight adhesions which were easily separable. The appendicitis was generally secondary to the pelvic disease in these cases.

**PATHOLOGICAL SOCIETY OF LONDON.**—A laboratory meeting was held at St. Bartholomew's Hospital on Tuesday, May 1st, Dr. F. W. ANDREWES in the chair. The following communications were made: Professor E. KLEIN, F.R.S., (1) *Bacillus equi*, a new pathogenic organism from the horse; (2) lantern slides illustrating the conveyance of plague by feeding.—Mr. F. A. ROSE, Carcinoma-sarcoma of the larynx.—Dr. F. W. ANDREWES and Dr. T. J. HORDER, Classification of pathogenic streptococci.

## REVIEWS.

### FRACTURES AND DISLOCATIONS.

THE fourth edition of Dr. LEWIS A. STIMSON'S *Treatise on Fractures and Dislocations*<sup>1</sup> contains much valuable new material, most of which is traceable to the more exact and accurate diagnosis of fractures which the *x* rays have made possible. The previous editions have established the reputation of the work as a complete and thoroughly reliable textbook. Its strong point is the clear and detailed description of the anatomy both of fractures and dislocations, and on this foundation the diagnosis and treatment are constructed in a very practical manner. Especially worthy of notice in this edition is the chapter on the several varieties of fractures of the lower end of the humerus, one of the most important and serious of all fractures, especially in the young. The additions which the *x* rays have made to our knowledge of carpal fractures are also incorporated, in particular the comparative frequency of fractures of the scaphoid, a fact unrecognized before this method of examination was available. The anatomy of congenital dislocation of the hip is well illustrated, but the discussion of its treatment is disappointing, considering the large amount of work that has been done on the subject during the five years which have elapsed since the previous edition was published; the bloodless methods of reduction deserve more than a paragraph of ten lines. New work has enabled Dr. Stimson to enlarge the sections on the operative treatment of old unreduced dislocations, particularly of the shoulder and hip. As a whole, this fourth edition is entirely up to date, and the many new illustrations are in every way excellent.

Dr. SCUDDER'S *Treatment of Fractures*<sup>2</sup> is a useful guide to the practitioner and student in the treatment of

fractures, and by its frequent renewal in revised and enlarged editions has proved its claim to a well-recognized, and indeed almost classical, standing among surgical monographs. Its chief merits are due to the success that has attended the efforts of the author to insist, in the first place, on the value of skiagraphy in ensuring greater certainty in diagnosis, and, in the second place, on the necessity of mechanical simplicity in treatment. The book probably owes much of its popularity to the fact that the text is clearly and profusely illustrated. The thoroughly practical teaching, aided by the drawings, to which much attention has evidently been paid in successive reissues of the work, has tended to render this a really useful addition to the list of modern handbooks for the busy surgeon. In the fifth edition of Dr. Scudder's book certain necessary changes have been made in the text, and the value of the illustrations has been maintained by the reproduction of *x*-ray plates, and by the addition here and there of half-tone blocks. Dr. Scudder, whose teaching throughout this work is based on modern views and practice, points out in the preface to his latest edition that the treatment of fractures of the neck of the femur is gradually undergoing a change which may prove to be very radical. What he regards as the "old-time" method of traction and countertraction, and also the later use of the Thomas hip-splint, are, in his opinion, not generally satisfactory; and he suggests that the method of forcible abduction and immobilization without continuous traction, quite recently introduced by Whitman and applied by this surgeon with success to children, might be found useful in cases of fracture of the femoral neck in the adult.

The bulky volume edited by Professor GUERMONPREZ on the treatment of fractures<sup>3</sup> consists of a series of essays by various authors, pupils of the editor. They all deal with the subject from the general standpoint, and give no systematic description of the treatment of particular fractures. The book is in fact an exhaustive exposition of certain special views which Professor Guermonprez holds on the management of fracture cases. The first essay treats of one of the most interesting of these special methods, that is, of the practice of delaying attempts at reduction in many cases of fracture until muscular spasm and effusion have subsided. Sometimes, it is said, reduction is only practicable at the end of a certain number of days, or even weeks, and Professor Guermonprez attaches great importance to such delay in the matter of obtaining accurate reduction and exact coaptation. His practice in this respect appears to have been much assailed by other surgeons, especially those in his own town of Lille, and he expresses his views in a highly controversial and polemic strain. The majority of the essays are devoted to the discussion of the use of massage and movement. The history of the employment of these means is given at great length, and the many controversies which have raged around the questions of the comparative merits of fixation and movement are related in detail. The value of massage before reduction is particularly emphasized. It is recommended that in fractures of the long bones, and the thigh in particular, the limb should be massaged daily until the haematoma has lost its induration, and that reduction be not attempted until then. This practice delays reduction from six to ten days, according to the seat of the fracture, the age of the patient, and other circumstances. Emphasis is laid repeatedly on the necessity for frequent examination after reduction; for most fractures the retention apparatus recommended is plaster, frequently renewed—in fractures of the wrist, for example, every five days, with massage and movement each time it is changed. Several chapters are devoted to the complications of fractures, contractures, arthropathies, myositis, and the like; the use of the various gymnastic methods and mechanical appliances to counteract and overcome these is fully described and illustrated. The literary quality and historical interest of the whole volume is of a high order, and there is evidence of careful research into the evolution of the particular methods of treatment with which it deals. This is the main purpose of the essays, rather than the production of anything in

<sup>1</sup> *A Practical Treatise on Fractures and Dislocations*. By Lewis A. Stimson, M.D. London: H. Kimpton. 1905. (Demy 8vo, pp. 844; 377 illustrations. 25s.)

<sup>2</sup> *The Treatment of Fractures, with Notes upon a Few Common Dislocations*. By Charles Locke Scudder, M.D., Surgeon to the Massachusetts General Hospital. Fifth Edition. Philadelphia and London: W. B. Saunders and Co. 1905. (Demy 8vo, pp. 563; 739 illustrations. 21s. net.)

<sup>3</sup> *Études sur le traitement des fractures des membres* [Studies in the Treatment of Fractures of the Limbs]. Par Drs. Guilloux, Eissendeck, Faidherbe, David, Merveille, and Platel. Edited by Professor Guermonprez. Paris: J. Rousset. 1906. (Demy 8vo, pp. 1,644; 235 illustrations.)

the nature of a systematic treatise, and they are therefore historically interesting rather than scientifically instructive. Each essay is complete in itself and has no particular connexion with others, and the result is that the whole ground is covered several times over by the various contributors.

#### CLIMATIC AND BATH TREATMENT.

DR. W. R. HUGGARD divides his *Handbook of Climatic Treatment, including Balneology*,<sup>4</sup> into five parts, devoted respectively to meteorology, the physiology of climate, climates and health resorts, baths and mineral waters, and the therapeutic use of climates and balneology. Part II, dealing with the effects of temperature and other climatic factors on the organism, is likely to be studied with interest by medical men, as the author has concisely grouped together the main results obtained (1) as deductions from general physiological principles, (2) from experiments on men and animals, and (3) from observations on men and animals who have lived in climates of different character. In this connexion the results of diminution of atmospheric pressure, as shown in the physiological effects of high-altitude climates, are considered at length. In regard to injurious effects on the circulatory system, the author concludes:

The truth probably is that rarefied air, in so far as it augments the strain thrown on the heart by exercise, does actually tend to develop cardiac disease. In my own observation it has appeared that persons who have come up to the mountains with mitral incompetence have generally complained of discomfort from the rarefied air. Persons affected with aortic disease, on the contrary, have but rarely suffered inconvenience. A special strain falls on the right ventricle when the blood is insufficiently aerated. . . . Cardiac discomfort is felt by some persons on arriving at Davos and for a few days afterwards. Ordinarily the sensation amounts only to a vague feeling of uneasiness in the cardiac region. . . . Mountain air acts as a tonic for the weak heart of persons flabby from illness or lack of exercise who have a good reserve of vitality. The important point in such cases is to be very chary of exercise till the heart has to some extent adapted itself to its surroundings, otherwise cardiac strain is inevitable.

Remarks on this subject are specially valuable coming from one who has practised so many years at Davos. In regard to the effects of diminished atmospheric pressure on the blood, the opinion is expressed that the facts ascertained make it almost certain that an actual and absolute increase of red cells takes place with altitude.

Part III, in which the various types of climate and the climatic health resorts are considered, naturally occupies a good deal of room. It includes a short chapter on the ocean as a health resort.

In Part IV a clear distinction is drawn between mineral waters when used externally, such as most of the simple thermal and many of the thermal sulphur springs, and those used internally. Those used internally are divided as follows: (1) Abluent (simple thermal waters, sulphur waters); (2) stomachic and diuretic (simple aerated, simple alkaline, alkaline salt); (3) mild intestinal stimulant (salt waters with and without carbonic acid, alkaline aperient waters); (4) strong aperient (containing magnesium sulphate); (5) haematogenic (with iron or lime as the most important ingredient); (6) alterative and nerve (arsenic or barium chloride as the most important ingredient). The last two classes are grouped together as a tonic and reconstituent group, the first four as a depurative group.

Part V consists of several short chapters devoted to the various diseases frequently treated by climates, mineral waters, and health resorts. The author is, we believe, quite justified in including "plethora" amongst the other morbid conditions. We believe that when Cohnheim's teaching first became widely known "plethora vera" was practically excluded from lists of possible chronic disorders, but nowadays clinical work points in the other direction. In regard to venesection, the author mentions a very remarkable experience of his own:

I drew 48 oz. of blood at one sitting from the arm of a young man of medium height, who had had at various times copious haemorrhages from a comparatively small amount of scattered pulmonary tubercle. The patient sat up the whole time with-

out any sign of faintness or sickness, declaring as the stream continued that he felt better and better. Only when the amount mentioned had been taken could I detect any sign of softening in the pulse, whereupon I stopped the flow. . . . The home medical man had said, as I afterwards learnt, that the patient ought to be bled every six months.

In a notice like the present, it is impossible to do justice to the time, care, and thought which have evidently been given to the whole subject and arrangement of the book. This is no hastily put together compilation, but the outcome of much study, consideration, and personal observation on which both the author and his readers are to be congratulated.

#### SOIL AND WATER.

THE second volume of the encyclopaedic series of manuals on public health subjects,<sup>5</sup> now being issued in France under the editorship of Professor BROUARDEL and Dr. MOSNY, is devoted to a very complete study of the properties of soil and water. It is a substantial volume of 450 pages, with two coloured maps, and a large number of woodcuts. The geological portion, which has been assigned to Professor DE LAUNAY, of the French School of Mines, deals with the various forces governing the changes in the earth's crust, and gives an exhaustive history of the various formations of which it is composed. Geological charts and their uses are described and illustrated, and a full account is given of the nature of subsoils, and the part played by geology in the origin and composition of natural mineral waters. The chemical portion has been undertaken by M. BONJEAN, head of the State Laboratory of Hygiene. Soils are here considered with reference to humidity, to temperature, and to their atmosphere, and the importance which they possess as the fixers of such chemical matters as are given to them in solution or suspension by watercourses. The bacteriology of soils is illustrated by a very full list of micro-organisms, and a brief account is given of the diseases produced by such organisms. Notice is also taken of the parasites which have their habitat in the soil. The portion of the volume which deals with water is by far the greater, and is the work of Messrs. Ogier and Bonjean. Under the heads of hydrology, chemistry, and microbiography a very complete account is given of all that the student of hygiene may require to know of this highly important subject. The position of water, whether by itself or in combination with organic and inorganic substances as one of the chief necessities in alimentation, is fully discussed, and its importance as an article of diet set out in detail. The authors then pass to the examination of waters and to the consideration of their purity from every point of view. The care to be observed in collecting samples for analysis, the methods of analysis, and the interpretation of the results are all set out. It is to be noticed that the form of analysis and the importance of certain figures differs somewhat from the usual report of an English analyst. Little heed is taken of the presence or amount of free and albuminoid ammonia, except when combined with large quantities of chlorides; the presence of phosphates is largely regarded as a test of contamination, and undue stress is laid upon the value of permanganate as a test for organic pollution. The bacteriological examination is apparently regarded as of far greater importance from the point of view of disease and potability and the possibility of contamination, and for this purpose the various forms of bacilli are catalogued and described at great length, as well as the other inhabitants of water which are capable of becoming human parasites. Cultures and stains are fully discussed, and this portion of the book is extremely complete. The following pages deal with methods of purification—mechanical, physical, and chemical; with the process of filtration on a large scale; and also with the various forms of household filter. The volume concludes with the chemical methods of purifying water, such as the addition of ozone, etc. In conclusion, we welcome a valuable addition to the textbooks of hygiene, and can assure those of our readers who find no bar in French that in this volume they will meet with a very complete and interesting contribution to a most important subject.

<sup>4</sup> *A Handbook of Climatic Treatment, including Balneology*. By W. R. Huggard, M.A., M.D., F.R.C.P. London: Macmillan and Co. 1905. (Demy 8vo, pp. 552. 12s. 6d.)

<sup>5</sup> *Traité d'Hygiène*. Publié en Fascicules sous la Direction de MM. P. Brouardel et E. Mosny. II. Le Sol et L'Eau. Par L. de Launay, E. Bonjean, E. A. Martel, et J. Ogier. Paris: J. B. Baillière et Fils. 1906. (Demy 8vo, pp. 464. Fr. 10.)

## PUBLIC HEALTH HANDBOOKS.

THROUGH the resort to thin paper, a small but clear type, and a limp leather binding, Dr. Brock has been able to bring his *Manual of the Public Health Law of Scotland and Principles of Public Health*<sup>6</sup> within the compass of a handy pocket volume. In preparing this compendium, Dr. Brock has rendered a distinct service to county and burgh councillors, legal officials, medical officers of health, and others engaged in public health administration in Scotland. Nowhere else will they find so complete a statement of the public health law of Scotland. Nothing appears to be omitted which it is necessary for them to know, and on the other hand there is nothing in the book of the nature of padding. Dr. Brock gives *in extenso* the text of the Public Health (Scotland) Act, as amended, the Food and Drugs (Amendment) Act of 1879, and the Margarine Act, together with admirable abstracts containing all that public health officials require to know of the Burgh Police Acts of 1892 and 1903, the Local Government Acts of 1889 and 1894, the Housing of the Working Classes Act of 1890, the Factory and Workshop Act of 1901, and of all the other Acts and Orders which local authorities in Scotland have to administer. A useful feature of the book is that each statute has appended to it relative memoranda and circulars by the Local Government Board for Scotland, and is furnished with the necessary elucidatory annotations. In a separate appendix we find a valuable, although somewhat summary, digest of legal decisions under the Public Health and Burgh Police Acts. In another appendix is presented the most condensed and lucid exposition of the methods employed in working out vital statistics which we have yet seen. The book affords very little opening for criticism, but it might reasonably be objected that in a work of its limited scope so full a presentation as it contains of the views of the opponents of hospital isolation in scarlet fever (and that without any indication of what has been said on the other side) is hardly justified. That all other disinfectants than the three specified in the book—one of which is carbolic acid—"should be more correctly termed antiseptics" is a rather cryptic utterance. The redundant use of the conjunction "and" is a smaller blemish. The book is furnished with that admirable thing, a copious index, and altogether is calculated to be of the greatest service to those engaged in public health administration in Scotland.

When the special diplomas in public health were first instituted, they were taken advantage of much more by medical men who had been in general practice for some years than by those who had been on the *Medical Register* a bare twelvemonth. It is not perhaps too much to say that the handy volume on *Hygiene and Public Health*,<sup>7</sup> which Messrs. Cassell added to their series of manuals for students of medicine in 1890, enabled many a practitioner to master the details of the subject in a manner which the exigencies of a busy practice would have rendered almost impossible if larger volumes only had been available. Since 1890 revisions and reprints of the work have appeared with very nearly the regularity of a Christmas annual. The latest edition, which is written jointly by Dr. WHITELEGGE and Dr. GEORGE NEWMAN, has been subjected to a much greater amount of revision than any of its predecessors; and although the general arrangement has been preserved, and there is still the charm of style and conciseness of description which attracted the student of public health in the Nineties, a very considerable amount of new matter has been introduced. Not only have the 518 pages of the first edition been increased to 644, but about another 100 pages have practically been added by the free use of breviter type in place of long primer. The much more intimate connexion which sanitary administration now has with the workers in factories and workshops is well shown by the fact that while in 1890 two pages were considered sufficient to deal with this subject, in the present edition 18 pages, and many of them in the smaller type, are required. The section on milk now demands 22 pages in place of 10,

and included in the additional matter is a very clearly-written account of the methods of examining milk. The chapter on specific diseases has been extended; several pages have been added to the section on diphtheria alone. Among the preventive measures advised in connexion with this disease no mention is made of the systematic search for "missed" cases, especially among school children, by the aid of bacteriological examinations. In a work such as this it is extremely difficult to avoid controversial matters; but the authors have succeeded, without being unduly dogmatic, in placing debatable points before their readers in a judicial and impartial manner. Exception may, perhaps, be taken by some to the statement on page 131 that "tuberculosis is not commonly spread by milk," but on page 412 it is pointed out as probable that the terms "tabes mesenterica" and "tuberculous meningitis" are often employed in a loose way in making out certificates, and that it would not do to place much reliance upon the tuberculous nature of the majority of the cases so certified. Upon one other much-debated question—the effect of hospital isolation upon the spread of scarlet fever—the authors write: "Broadly, it may be said that any limitation of the spread of infection by personal contact must reduce the prevalence of the disease, and that therefore, if rightly managed, under proper conditions, hospital isolation is of direct and marked value in the reduction of scarlet fever." The value of cross-references in a text-book is almost incalculable; and although there are many such in this volume, they might, in many other instances, replace such phrases as "reference has already been made to" or "for reasons stated elsewhere." The typographical errors are extremely few; there is one on page 16, and two of the twenty-four illustrations are wrongly numbered, giving rise, in one case, to some confusion, Fig. 12 being given as Fig. 10, and Fig. 24 as Fig. 23. We cannot close without expressing our admiration for the triumph of the paper manufacturers, for although this edition contains at least a third more matter, it does not weigh appreciably more than the first edition, which was published sixteen years ago.

In his *Practical Sanitary Science*<sup>8</sup> Dr. SOMMERVILLE has given the candidate for a public health diploma a short outline of the chemical and physical methods of analysis in the practical portion of the examination. The volume is well printed, on good paper, and well illustrated—though without discrimination, for many of the figures represent such pieces of apparatus of everyday use as to suggest that the students for whom the work is intended lack all acquaintance with a chemical laboratory. Water, in its manifold aspects, naturally occupies the premier position, and is responsible for nearly one-third of the entire book. The subject is, in the main, well handled. The chemical methods of examination are well chosen, carefully described and explained, and accurate, although in the chapter "Oxidized Nitrogen" we miss the simple and useful indigo method, and also suggestions as to what temperature and what time limit should be adopted in the estimation of oxygen absorbed. The chapter which closes this section, "Interpretation of Results of Analysis," is particularly well balanced and helpful, although its value is somewhat lessened by the paucity of bacteriological detail in the examples commented upon. In a future edition such words as "nil," "not performed," "excellent," should give place to others capable of more exact interpretation. Although the author on the first page of the book enunciates his faith in the following words:

In certain cases . . . no chemical analysis, however delicate, can furnish evidence of the pollution. So in other cases the most exact bacteriological examination may wholly fail to discover a dangerous water. The well-informed analyst . . . will welcome all reliable scientific methods that can assist in throwing light on his search—

it is obvious that in his opinion the bacterioscopic analysis of water is of but secondary importance; and Chapter XIII will need to be considerably amplified, and, indeed, brought up to date as regards the detection of *B. coli*, before the information given therein can be considered adequate to the student's requirements. Nor can

<sup>6</sup> *Sanitary Laws of Scotland and Principles of Public Health*. By W. J. Brock, D.Sc., M.B., C.M., F.R.S.Ed., F.F.P.S.Glasg. Edinburgh: Oliver and Boyd. 1905. (Cr. 8vo, pp. 480; 7s. 6d.)

<sup>7</sup> *Hygiene and Public Health*. By B. A. Whitelegge, C.B., M.D., B.Sc., F.R.C.P., D.P.H.; and George Newman, M.D., D.P.H., F.R.S.E. New edition. London: Cassell and Co. (Fcap. 8vo, pp. 644. 7s. 6d.)

<sup>8</sup> *Practical Sanitary Science: A Handbook for the Public Health Laboratory*. By D. Sommerville, B.A., M.D.R.U.I., D.P.H.Cantab., Lecturer in Public Health, King's College, London. London: Baillière, Tindall and Cox. 1906. (Demy 8vo, pp. 310; 92 illustrations. 10s. 6d. net.)

the dictum, "no drinking water should contain *B. coli* in 250 c.cm.," be accepted without qualification. Similar comments apply in the case of the other sections dealing with bacteriological methods, and the author appears to share the opinion that such can only be taught successfully by practical demonstration in the laboratory. It may be noted, too, that the bacteriological examination of sewage is not even referred to, whilst the Rideal-Walker method, despite its imperfections, is the only method of testing disinfectants mentioned. The chemical analysis of foods is well described; so, also, the microscopy of textile fabrics, food stuffs, and parasites; many of the illustrations in this last connexion are well reproduced, and lose none of their value from the regularity with which they recur in laboratory guides of this class. The appendix, occupying some fifty pages, forms an extremely valuable summary of the methods of preparing standard solutions and of the leading characters of the various chemical compounds met with in public-health work.

#### THE ANIMAL PARASITES OF MAN.

MODERN investigations have extended our view of the part played by the lower life forms in the production of the diseases of man. The mysteries of disease causation are becoming yearly fewer in the light of increasing knowledge. The extension of our sphere of knowledge demands that the investigator shall invade the realm of the zoologist; he must acquire such an acquaintance with varieties of life forms as will enable him to prosecute his study of the development of human disease by means of the study of the causative agent and the vehicle in order that steps may be taken for the protection and preservation of the subject—man. In the English edition of BRAUN'S *Animal Parasites of Man*,<sup>9</sup> prepared by Dr. SAMBON and Mr. THEOBALD, we find such an adaptation of zoology to medicine. Textbooks, in the nature of things, must be a trifle behind the latest expositions set forth in journals and proceedings of societies. The work before us bears date the current year, and the preface was written in November, 1905. It should therefore embody advances achieved up to 1905 at latest. In this respect the book is disappointing. As a case in point, the information regarding trypanosomes is some three years behind the times. Again, when speaking of the discovery of the entrance of larvae of ankylostoma into the human body through the skin, regarding which the authors "await the proofs," reference to the work of Schaudinn, Calmette and Bréton, Pieri, and Boycott on this point would have furnished sufficient proof of the reality of such means of infection. Perhaps we may be grateful for the omission of much of the latest work if that is the reason for the retention of the old spelling of *ankylostoma* in preference to the newer but "abominable" and pedantic *agchylstoma*. On the other hand, the admirable condensation of the natural history of mosquitos and other nematoceros flies will be found useful. The illustrations are specially commendable. It would be an advantage if the description of the ticks were made as up-to-date and as useful from a practical standpoint. The complete satisfaction of this desideratum awaits the advent of a work dealing with the anatomy of the Ixodidae. A commencement in this direction, published in America, has escaped inclusion in this work. But, even without this, sufficient is known about these arachnoids to furnish information adequate to enable medical men practising in warm countries to recognize the different species. The pathological aspect of tick diseases is not sufficiently dealt with; for instance, we read with regard to *Argas persicus*: "The virulence of its bite is probably due to the tick transmitting fever germs from natives, probably inured, to strangers, who would be susceptible" (p. 372). This is a type of the information provided regarding tickborne diseases. The style is not easy; from introduction to finish special cerebration is frequently called for to elucidate the exact meaning of the various authors, thus causing an expenditure of energy which the reader would rather have been spared. There are numerous misprints of the following type: *argus* for *argas* (p. 370); *gambiense* for *gambiense* (p. 447). For students the information given may be relied upon so far as it goes,

but the work requires to be simplified in diction; while for medical men engaged in work in the field the book requires revision with a view to bringing its information up to date, say to within six months of publication.

#### MINERS' ANAEMIA.

AFTER having devoted a year to an inquiry, hygienic and social, into the coal miners of the North of France and the Pas de Calais, Dr. E. FRANÇOIS has embodied the outcome of his researches in an essay in which he deals with the anaemia of miners<sup>10</sup> and the parasitic diseases to which this class of workmen is exposed. In dealing with ankylostomiasis attention is drawn to the fact that the adult worm is never met in the free state, for it can only live in the intestinal canal of a host. Since the ova which are passed in the faeces of infected persons require oxygen and a humid atmosphere in order to be hatched, the soil of a coal pit is not always a good medium for their development. Admitting that the ordinary channels through which the larva gains an entrance into the body is by the consumption of contaminated food and drinking water, also through the skin, François raises the question as to whether the ova might not be inhaled along with the dust from the floors in mines. This is a most unlikely event, for the ova of the *Ankylostoma duodenale* only linger in the moist sludge and in the rotten wooden props along the sides of the galleries, and not in the dry dust that is lying about all over a mine. Besides, it is not the ova, but the larvae, that have to be avoided, and these latter are only found where there is moisture. Although eosinophilia is frequently present in ankylostomiasis, François is of the opinion that a diagnosis of the disease cannot be made upon this alone. Ankylostomiasis tends to cure itself, since the worms cannot reproduce themselves in the alimentary canal. The best results in treatment were got from the use of male fern.

The inquiry divided itself into two parts: (1) Dealing with ankylostomiasis and the helminthozoa generally; (2) a consideration of the facts relating to the hygienic conditions of the mines, with special reference to the depth, ventilation, temperature, humidity, etc. François criticizes rather severely the deficient ventilation of some of the French coal mines, in which 90 to 1,600 men were employed. Naked lights were used in 16 of the 37 coal mines examined; in 8 mines the use of naked lights is restricted, while in 13 of the pits only safety lamps are allowed. The lowest temperature in some of the mines was 7° to 10° C. above zero in the heart of winter, and 16° to 18° C. in summer. Nearly 20 per cent. of the miners examined were found to harbour the ankylostoma. Miners' anaemia is in France a much older malady than the outbreak of the disease at the St. Gothard Tunnel would lead us to infer. The mines that are moist and have a fairly high temperature are those in which the disease spreads, whereas in those that contain salt ankylostomiasis cannot flourish. Of 150 men who were known to be suffering from the worm, in 140 there were no symptoms, in 6 there were characteristic and grave symptoms. François is of the opinion that when several ankylostomes are grouped together upon a limited portion of the intestinal mucous membrane, the symptoms are more severe than when a similar number of worms are scattered over the lining membrane of the alimentary canal. The influence of such other parasites as ascaris and trichocephalus must not be lost sight of. The local damage inflicted upon the intestinal mucous membrane may be a possible cause of the feverish attacks from which some of the infected miners suffer. To the production of miners' anaemia ankylostoma, ascaris and trichocephalus all contribute, either through the toxins they form or the injuries inflicted upon the intestinal mucous membrane. As a contributory cause of miners' anaemia, a place must be assigned to anoxemia—that is, a group of symptoms caused by insufficiency of oxygen in the respired air or air fouled by the admixture of other gases, smoke, dust, CO<sub>2</sub>, etc.

The hygiene of the miner is not overlooked by François, nor is the irregular manner in which he gets his food

<sup>9</sup> *The Animal Parasites of Man*. By Dr. M. Braun. Third edition. Edited by L. W. Sambon, M.D., and F. V. Theobald, M.A. London: John Bale, Sons, and Danielsson. 1905. (Demy 8vo, pp. 453. 21s.)

<sup>10</sup> *Anémie des Mineurs: Étéologie, Sémiologie, Prophylaxie, Organisation Médicale*. Par le Dr. E. François, Délégué à l'Enquête sur l'Ankylostomiasis. Paris: A. Maloine. (Demy 8vo, pp. 110. Fr. 2 f. 0.)

passed over in silence. The subject of anthracosis, women's work at mines, gardens for the miners, and the institution of mutual benefit societies are all considered. To the funds of the benefit societies the miners contribute 2 per cent. of their wages and the mining administration an amount equal to half the total of the men's contributions. On the Committee of Management both employers and employed are represented. Medical attendance and drugs are provided in case of sickness. The medical men are nominated by the Council of the Mining Administration, to which aggrieved miners, who, it is stated, can be very exacting, are not slow to carry their complaints. Medical men attend members of the benefit society and their families at rates varying from half a crown to 5s. a year, and in the case of injury the doctors receive a complimentary fee varying from 10d. to 2s. 6d.

#### ZOOLOGICAL TEXTBOOKS.

Few textbooks of practical zoology have met with such deserved success as the well-known *Junior Course of Practical Zoology*<sup>11</sup> by Messrs. MARSHALL and HURST. It has long been, and still is, the standard textbook in a large number of zoology teaching centres, and is one of the few books which are really satisfactory for the student working at home. The fact that the sixth edition has now appeared, and that, except for having been brought up to date, the book is still practically the same as when first published in 1886, is proof of its excellence. Unfortunately neither of the authors lived to see the fifth edition come out, the work of revising that and the present edition having been in the capable hands of Dr. F. W. GAMBLE. The present edition is only twelve pages larger than the fifth, and the extra pages are for the most part due to the inclusion of three new types. Dr. Gamble has thought it advisable to introduce the student to the sporozoa through the types *Monocystis* and *Coccidium*, and has added another coelenterate type in *Obelia*. But although there are only twelve pages added in this edition, of which seven at least are taken up with the new types, other matter has been squeezed in in various places, the space having been obtained by introducing small type here and there. Dr. Gamble says in the preface that "the dissections of the crayfish and of the rabbit have been simplified by the use of small type," which apparently means that those parts which Dr. Gamble considers of less importance have been put in small type. We would have preferred to see the same type used throughout the book, even though it necessitated the addition of a few more pages. Discrimination between what is of prime and what is of secondary importance is, we submit, unfortunate in such a book as this, more especially when the distinction was not made in the earlier editions. Not that we wish to cast any slur upon Dr. Gamble's judgement: but if some parts of the dissection of the crayfish and rabbit were to be so characterized, why not parts of other types also? However, this by the way; such details do not, of course, detract from the value of the subject matter, which is, as usual, excellent and up to date.

Dr. GAMBLE has also revised for publication the ninth edition of the companion volume upon *The Frog*,<sup>12</sup> by one of the same authors. Dr. Gamble, has taken the same care and used the same wise judgement in both cases. In the present edition the only alterations are a revision of the chapter upon development and the addition of a few figures, and the book has only increased in thickness by a few pages. The chapter on development has not been completely rewritten, but has been improved by interpolation and a few small alterations. The few figures which have been added are taken from the author's *Vertebrate Embryology*, and also enhance the value of the book.

<sup>11</sup> *A Junior Course of Practical Zoology*. By the late A. M. Marshall, M.D., D.Sc., M.A., F.R.S., and the late C. H. Hurst, Ph.D. Sixth edition, revised by F. W. Gamble, D.Sc. London: Smith, Elder, and Co. 1905. (Crown 8vo, pp. 524. 10s. 6d.)

<sup>12</sup> *The Frog: an Introduction to Anatomy, Histology, and Embryology*. By the late A. Milnes Marshall, M.A., M.D., D.Sc., F.R.S. Ninth Edition. Edited by F. W. Gamble, D.Sc. London: David Nutt. 1906. (Crown 8vo, pp. 172. 5s.)

THE estate of the late Mr. Frederick Wood, F.R.C.S., of Brighton, has been sworn as of the net value of £46,643.

#### NOTES ON BOOKS.

The edition for 1906 of *Low's Handbook to the Charities of London*<sup>1</sup> has now appeared. The fact that it has been published for seventy-one years in succession is sufficient proof of its utility; it supplies succinct information brought well up to date about more than twelve hundred charities. Reference to it is easy because it is alphabetically arranged, and being published at the low price of 1s. it is within the reach of all philanthropic pockets.

The *Dentists' Register*<sup>2</sup> for 1906, which has now been issued, contains altogether the names of 4,653 persons—some 81 fewer than its predecessor. Of these 2,468 are holders of a licence in dentistry from one or other of the four colleges entitled to grant licences. The great majority of the remaining 46 per cent. represent those who were admitted to the *Register* when first instituted some twenty-seven years ago on the strength of the fact that they were in bona fide practice as dentists before the passing of the Dentists Act. Sixteen, however, have ordinary British surgical qualifications, three Colonial diplomas, and twenty-one American degrees in dentistry. Of the Licentiates it may be noted that 300 hold higher registrable dental qualifications or ordinary medical and surgical qualifications. The number of Licensees of the Royal College of Surgeons of England greatly exceed those of all other corporations put together.

The fourth edition of the *Dental Annual and Directory*,<sup>3</sup> that for 1906, is a very comprehensive volume. As a directory its special point is that practitioners of dental surgery are distributed according to the locality in which they reside, and as a year book it contains full notes on all recent advances, each compiled by a recognized authority on the subject under review. Another useful feature is a diary of future events likely to be of special interest to dentists. The book is extremely well got up, and its use facilitated by alphabetical arrangement of its subject matter, and by heavy type headings at the corner of each page.

Dr. GERRARD, of the Federated Malay States Medical Service, deserves the thanks of all practitioners whose work, present or future, lies in Malaysia, for his *Vocabulary of Malay Medical Terms*.<sup>4</sup> Nothing can be more puzzling than the task which confronts the beginner when called upon to treat a people who, though extraordinarily keen observers, interweave a belief in the spirits of the forest with their medicine, and autopsies being held anathema, dispense alike with anatomy and pathology. It is this task which Dr. Gerrard seeks to lighten by his list of diseases and terms, a sort of *catalogue raisonné* from which not a little information concerning local diseases may be gleaned. After this list we have a few conversations with imaginary patients in the ordinary *bahasa dagang* or "bazaar Malay." These are of a distinctly useful character, which cannot always be said of similar productions. If we had to make any adverse criticism it would be that the little book presupposes a tolerable knowledge of the language, and is thus not so helpful for the beginner as it would have been had the literal English of the Malay equivalent of the disease been added in each case. Thus "puerperal sepsis" is given as *demam susu*, which the learner would have been more likely to remember had he been told that this means milk fever. We note, too, a somewhat inconsistent use of contractions. Thus *sekali* is generally "*ekali*," sometimes "*s'kali*," and sometimes correctly *sekali*, while *berapa* is always corrupted to "*brapa*." But these are faults of minor importance, and the little volume may be safely recommended to those of the profession who are called upon to practise it in Malay lands.

Professor ADAMKIEWICZ, the inventor of the cancer "cure" termed "cancroin," has published a pamphlet under the fanciful title of *Der Krebs und die "Goldene Statue"*, in which he complains bitterly of the inappreciation of his critics and the injustice of their attacks upon him.

<sup>1</sup> London: Eliot Boothroyd.

<sup>2</sup> London: Spottiswoode and Co. (3s. 4d.)

<sup>3</sup> *The Dental Annual and Directory, 1906*. London: Baillière, Tindall and Cox. (Crown 8vo, pp. 651. 7s. 6d.)

<sup>4</sup> *A Vocabulary of Malay Medical Terms*. By P. N. Gerrard, M.D. (Dub.) D.T.M.H. (Cantab.), etc. Singapore: Kelly and Walsh. 1905. (Cr. 8vo pp. 108, with plate of Snellen's test types in Malay.)